

In the Claims:

The claims are as follows:

1. (Currently Amended) A method comprising:

providing a performance system;

measuring an initial measurement of a first parameter of a trainable subject;

providing a control system for controlling a second parameter, wherein the second parameter is a parameter of the performance system;

determining, using the control system, for a given activity a point of efficiency of [a]the trainable subject with respect to ~~at least one~~the first parameter, wherein the point of efficiency is determined by repeatedly increasing stress on the trainable subject by controlling the second parameter and then re-measuring the first parameter until said point of efficiency occurring just prior to the trainable subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the ~~at least one~~first parameter to vary more rapidly or less rapidly with respect to the second parameter differently than before;

~~a control system~~ determining a range of tolerance, using the control system, surrounding the point of efficiency; and

training [said]the trainable subject within [said]the range of tolerance of [said]the point of efficiency with respect to a state of accommodation until a state of inefficiency with respect to said at least one parameter or exhaustion occurs; and

repeating the method, wherein the point of efficiency is recalculated and changes each repetition of the method.

2-3. (Cancelled).

4. (Currently Amended) The method of claim 1, wherein the ~~at least one~~ first parameter is one of a physical parameter, emotional parameter, and mental parameter of the trainable subject.

5. (Currently Amended) The method of claim 4, wherein the ~~at least one~~ first physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, weight lifted, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

6. (Currently Amended) The method of claim 4, wherein the ~~at least one~~ first physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate, VO_2 , perspiration rate, metabolic rate, blood flow, breathing rate, heat given off, and breath length.

7. (Currently Amended) The method of claim 4, wherein the ~~at least one~~ first parameter is observed by a signal selected from the group of verbal utterance, physical motion.

8. (Previously presented) The method of claim 1, wherein the trainable subject is selected from the group consisting of an animal, a human, a group of humans, a group of animals, a cellular automata, a group of cellular automata, microbes, and plants.

9-16. (Withdrawn)

17. (Currently Amended) A method comprising:
providing a performance system;

measuring an initial measurement of at least one first parameter, wherein the at least one first parameter is a parameter of a subject;

activating the performance system;

recording at least one second parameter, wherein the at least one second parameter is a parameter of the performance system;

measuring at least one parameter of a subject;

determining ~~an at least one a~~ point of efficiency of the at least one first parameter of the subject with respect to a state of accommodation by changing the at least one second parameter of the performance system to increase stress on the subject, re-measuring the at least one first parameter and repeating the stress increase and re-measuring, until the at least one first parameter of the subject substantially changes beyond a given tolerance function;

wherein the point of efficiency occurs just prior to the subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the at least one first parameter to vary more rapidly or less rapidly with respect to the at least one second parameter;

determining a range of tolerance surrounding the point of efficiency[, ~~said point of efficiency occurring just prior to the subject no longer being able to accommodate additional stress and entering a state of inefficiency or exhaustion causing the at least one parameter of the subject to vary differently than before;~~ and

training the subject within said range of tolerance of the point of efficiency so the duration the subject can maintain the point of efficiency changes; and

repeating the method, wherein the point of efficiency is recalculated and changes each repetition of the method.

18. (Currently Amended) The method of claim 17, wherein the at least one first parameter ~~of the~~ subject is a physical parameter.

19. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of running turnover rate, stride length, stride strike force, muscle contraction speed, muscle contraction profile, muscle contraction strength, electromagnetic activity profile, chemical activity profile, body temperature, and blood pressure.

20. (Original) The method of claim 18, wherein the physical parameter is selected from the group consisting of heart rate, heart beat strength, respiration rate, VO_2 , perspiration rate, metabolic rate, blood flow, breathing rate, and breath length.

21-33. (Withdrawn)